

N O R T H E R N
 C A L I F O R N I A
 D X C L U B



The Editor's Keyboard

DXer Wins Top Honors!

It was a surprise and a pleasure to learn that *The DXer* has earned top honors in the annual newsletter contest conducted by the Amateur Radio News Service (ARNS). See *RIMshots* and the story by Dave Barton, AF6S on page 3 for details.

Yes, it was a surprise. I knew *The DXer* was a pretty good newsletter, but I had seen some of the top entrants from last year's contest. The *W3OK Corral*, for example, is a great newsletter and a consistent winner, and to be rated alongside it at the top of almost 100 entries is extremely gratifying.

I thank Al for his comments in *RIMshots*. But the success of *The DXer* is due in no small part to the quality of the contributed material—and to the effective layout format developed by Dave Barton and his son Ken, when Dave was Editor. Their work has made assembling *The DXer* painless—once the stories and pictures have been prepared. And I tip my hat to my frequent contributors—like Cass, WA6AUD and Elliott, K6ILM—as well as everyone else who has taken the time to contribute an article, a letter, a photo or a QSL to our newsletter. You all have a piece of this proud moment!

It's That Time Again!

The 1996 International DX Convention will be held Friday through Sunday, April 19-21 at the Holiday Inn in Visalia. This year, your host is the Southern California DX Club.

The convention features all the "traditional values" of our annual bash: Friday and Saturday evening hosted cocktail parties; For a and technical sessions; the Saturday night banquet; the Sunday breakfast buffet; prizes and drawings galore; the Friday morning golf tournament; ladies' activities; QSL checking, and more.

This year's Saturday night banquet speaker will be our own Wayne Mills, N7NG, and his subject is Myanmar—the first real operation from XZ in 30 years.

Sorry, it's too late to pre-register—but not too late to go! Registration is \$55. If you can't shoehorn into the Holiday Inn, The Radisson, (209) 636-1111 and the Lamplighter, (209) 732-4511 should be able to accommodate you.

Remember: it's more fun than you thought you could have with your clothes on!
 —Garry Shapiro, NI6T



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Roster Changes

Change of telephone

Garry Shapiro, NI6T
 H (408) 353-6068
 W (408) 353-6068

New Applicants

The new membership application procedure requires the names and callsigns of qualified applicants to be published in *The DXer* prior to the monthly meeting at which their applications will be voted.

The following DXers have applied for full membership.

Alex Meyer, WB6AFJ
 San Jose, CA

No Meeting!

If you are looking for info about the April meeting, stop looking! There is no April meeting, due to the International DX Convention. We'll tell you about the May meeting next month.

N O R T H E R N
C A L I F O R N I A
D X C L U B

Club Officers:

President: Al Burnham, W4RIM
 Vice President: Glenn Vinson, W6OTC
 Secretary: Lloyd Cabral, AA6T
 Treasurer: Stan Goldstein, N6ULU
 Director: Eric Swarz, WA6HHQ
 Director: Rich Chatelain, AB6ZV
 Director: Jim Knochenhauer, K6ITL

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 9-Band Award: John Brand, K6WC
 California Award: Rubin Hughes, WA6AHF
 Historian/archivist: Ron Panton, W6VG

Records Manager: Ron Panton, W6VG
 Publications Mgr: Ron Panton, W6VG

Club Repeater, W6TI/R

Frequency/offset: 147.36 MHz, +
 Trustee: Bob Vallio, W6RGG
 Comm. Chairman: Eric Swarz, WA6HHQ
 Club simplex: 147.54 MHz (suggested)
 Thurs. Net QTR: 8 pm local time.
 Net Manager: Randy Wright, WB6CUA
 DX News: Dave Pugatch, KI6WF
 Propagation: Al Lotze, W6RQ
 Westlink: Craig Smith, N6ITW
 Swap Shop: Ben Deovlet, W6FDU
 QSL Information: Mac McHenry, W6BSY

W6TI DX Bulletins:

W6TI Station Trustee Bob Vallio, W6RGG, transmits DX information at 0200 UT every Monday (Sunday evening local time) on both 7.016 and 14.002 MHz.

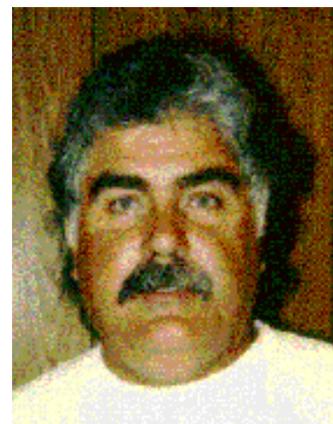
Club address: Box 608
 Menlo Park, CA
 94026-0608

The DXer is published monthly by the Northern California DX Club and sent to all club members. Unless otherwise noted, NCDXC permits re-use of any article in this publica-

Board of Directors Meeting

The Board of Directors Meeting was held on March 12th at Brothers Deli in Burlingame and was called to order at 7:10 pm by President Al Burnham, W4RIM. Present also were W6OTC, AB6ZV, K6ITL and AA6T. The Minutes of the previous month were approved as printed in *The DXer*.

- Rich, AB6ZV, gave further definition to the “Member of the Month” program. He also stated he has someone in mind as the first Honoree.
- Al, W4RIM, announced that Chuck, AA6G has accepted the Chairperson’s job for the upcoming NCDXC 50th Anniversary.
- Marathon winners were K6MA mixed, AC6HY SSB and WG6P CW. Plaques to be distributed to the winners ASAP.
- The Board authorized payment/reimbursement to W6OTC for his purchase of the TV and VCR for the club.
- In an effort to reduce the workload on W6VG, new member Don Berticvich, KO6GI, has agreed to serve as Interim Publications Manager. Ron will still have plenty to keep him busy handling the Roster, mail and the club’s archives.
- Al, W4RIM has selected Garry, NI6T and Rich, AB6ZV to serve on the Nominating Committee. Al also mentioned that Rich, WB6UDS, is busy assembling his DXer of the Year Committee.
- The Board discussed at length second readings for membership applicants. By a vote of 4 to 1 (K6ITL dissenting), names and callsigns of all applicants will be published in *The DXer* preceding the meeting in which their application will be voted. This provides *all* members the opportunity to attend and voice their opinions about any applicant. This change achieves the Board’s goal of streamlining the application process while retaining membership review of prospective applicants.
- Glenn, W6OTC, stated that—since he now has the Board’s feedback from the preliminary Procedures Manual changes—he can now complete the final draft.



—Lloyd Cabral, AA6T, Secretary

The meeting was adjourned at 8:10 pm.

General Meeting

and Vice Director Jim, W6CF. Brad—who *always* gets to speak first—discussed frequency allocation battles, PRB-1, the once-again-delayed Vanity Callsign Program and Washington DC/FCC Happenings. Jim announced the formation of the “DXCC 2000 Committee.” The group will evaluate the current DXCC program. Downstream, all amateurs will be asked to contribute ideas and comments.

Jim also discussed the preparations for WARC 1999. The ITU CW requirement below 30 MHz, Radio Rule #2735, will certainly be challenged—an item to watch! Questions, comments and concerns covered a wide range of topics.

NCDXC thanks REDXA for its warm hospitality in hosting this joint meeting. The meeting was adjourned at 10:05 pm.

—Lloyd Cabral, AA6T, Secretary

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The monthly meeting was jointly held with the REDXA on Friday, March 15th at Carrow's Restaurant in Petaluma. The meeting was called to order at 7:10 pm by Chuck Ternes, N6OJ, REDXA President. REDXA conducted a short business meeting. NCDXC President Al Burnham, W4RIM then conducted our shortened business meeting—approval of the minutes as printed in *The DXer*.

- Dave, KI6WF was the lucky winner of the evenings 50/50 raffle.
- An enjoyable dinner was followed by introductions. Those present stated their club alliance; many dual members were present.
- The evening's program was presented by Pacific Division Director Brad, K6WR

RIMshots

DXer Wins Top Award—Kudos to NI6T!

The DXer, edited by Garry, NI6T, has been judged one of the best ham newsletters in the country. *The DXer* was top-rated in the annual contest conducted by the Amateur Radio News Service (ARNS), an organization of amateur radio newsletter editors and publicists. (See the story by Dave, AF6S, on this page.) Garry, on behalf of the NCDXC, I congratulate you for receiving this well-deserved honor, and I know that I express the gratitude of the entire membership for your efforts.



Thanks, Volunteers!

OK, so I had to twist a few arms, but thanks to NCDXC members who are willing to do their part for the good of all, I am pleased to make the following announcements:

Recruiting/Elmering Committee. Marilyn, N6VAW, has agreed to chair this vital (new) committee, which is charged with implementing our recruiting/elmering efforts. The committee will develop a plan to be carried out by NCDXC members.

50th Anniversary Committee. Chuck, AA6G, will chair this committee. October is the 50th anniversary of the NCDXC! Chuck and his committee are making plans for the celebration!

Publications Manager. Don, KO6GI, is taking over on an interim basis from Ron, W6VG. Ron has been under the weather a bit lately, and we don't want to wear him out. Thanks, Ron, for all the hard work you have done! (Ron retains his job as Historian and Records Manager).

Nominating Committee. I have appointed Garry, NI6T and Rich, AB6ZV to serve on the Nominating Committee (1996-1997). They will select a third member. When constituted, the Committee will select a chairman. The committee's decisions will be published in the June *DXer*.

Parting RIMshot

The Second Reading Issue. The March *DXer* contained a Letter to the Editor from Randy, WB6CUA, urging the Club to retain two readings of applications for new members. The Board has revisited this issue and has acted to accommodate the concerns of Randy and others, while simplifying the application process. The Secretary will receive all new member applications, and determine that the application is complete and the required funds have been tendered. The applicant's name will be published in *The DXer*, and the application will be voted upon at the general meeting following publication. The applicant and his/her sponsor must attend this meeting, although the applicant will be excused during the vote and/or discussion.

DXer Tops in ARNS Contest

by Dave Barton, AF6S

The Northern California DX Club's *DXer*, edited by Garry Shapiro, NI6T, has received top honors in the 1995 Amateur Radio News Service newsletter contest. *The DXer* shared top honors with the Delaware-Lehigh Amateur Radio Club's *W3OK Corral*, edited by Clarence Snyder, W3PYF. There were 99 entries—from almost every state, several Canadian provinces and one each from Japan and Puerto Rico.

The *DXer* and *W3OK Corral* were among only eleven of the submitted papers to receive the ARNS Superior rating. A panel of three volunteer judges graded each submitted paper on appearance, "grab," content, readability (font selection, layout cleanliness, and such issues), and probably some difficult-to-define subjective factors. Member-submitted feature articles and cartoons are preferred, and that's just one area in which the *DXer* excels. It's a tough contest; many fine club newsletters are rated Excellent or Good, rather than Superior.

What's ARNS?

The Amateur Radio News Service is an ARRL-affiliated club whose purpose is to promote Amateur Radio, mainly by helping editors of ham-club newsletters improve their publications. Most of the about-250 ARNS members are in North America, and most serve their local clubs by editing the newsletter or by doing public relations work.

ARNS publishes its own monthly newsletter, the *ARNS Bulletin*. The *Bulletin* typically runs twelve pages of "how-to" articles on writing and publishing, "filler" stories gleaned from ARNS members' newsletters, and ARNS news.

One of the worst headaches a typical club newsletter editor has is getting enough high-quality material from club members. The *ARNS Bulletin* runs "how-to" articles by professional writers and editors (when we can get them to write for us) and by ARNS members with appropriate expertise.

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The Early Days...

C.F. (Bud) Bane, W6WB

The January DXer reported the passing of Frank Jones, W6AJF. Longtime member and radio pioneer Bud Bane provides this retrospective of Amateur Radio on the West Coast.

The recent passing of an old friend—Frank Jones—brought back fond memories of our association and of the early days of amateur radio. Frank’s beginning as an amateur radio writer would ultimately lead to his worldwide recognition in amateur circles.

His start can also be traced to a publication aptly named *Radio*. Since our time frame ranges from the late ‘twenties to the early and middle ‘thirties, younger amateurs may not be aware that such a publication ever existed—but it did. With the help of Frank Jones, Colonel Clair Foster, Art Collins, “Scratchi” and other writers who would ultimately gain fame, this new magazine quickly gained acceptance by amateurs throughout the world. Unfortunately, it fell victim to the Great Depression, but it left a paper trail that leads to one of today’s popular amateur magazines. (This writer helped start the magazine, became editor and produced the first DX column—Globe Girdlers.)

Our story begins with a brief scan of the *terrific ‘twenties*. Then, prohibition brought on bootlegging, speakeasies, highjacking and the Al Capone gangster era. Many people became on-paper millionaires overnight with a rising market, borrowed money, and ten-percent margins. Radio broadcasting to the public was becoming a reality. Radio amateurs were just beginning to realize that their low-power, one-tube transmitters and two-tube receivers could work the world.

How the magazine ever got started and managed to survive for several years during the Depression is a story in itself and involves a dynamic individual named Henry Dickow. We suspect he was an early operator at NPM, the Navy station at Pearl Harbor. We hear of him again in the early days of spark, as the publisher of a small sheet called *Amateur Radio News*.

While radio broadcasting was soon to become a giant industry, there were at first very few manufacturers of complete equipment. The shortage itself created a new industry—do-it-yourself kits. Kit builders needed how-to-do-it information and sources for tubes, batteries and components. Friend Dickow now appears again, this time as editor of a new magazine to serve that market—*Radio*. This

magazine was initially successful, but, as more manufacturers of complete receivers appeared, the kit business vanished, along with many suppliers of parts and accessories. With readership and advertising revenue both dwindling, *Radio* reached low ebb. The 1929 market crash finished off both the magazine and its publisher, who lost heavily in the stock market.

Undaunted, Dickow tried to salvage what was left by turning the magazine into a trade paper; it failed for lack of advertising support. Still in there pitching, Dickow regrouped, and rebirthed *Radio* as an amateur radio magazine. What had he seen to convince him that he could compete with King QST?

In the mid- and late-’twenties, the word *relay* in the name American Radio Relay League had considerable relevance, particularly with respect to trans-Pacific traffic to the States. Much of this was originated by US Forces in China and the Philippines. Message traffic was no small matter—hundreds of messages were exchanged monthly between military personnel and their families stateside. One station handling this traffic belonged to Clair Foster, W6HM, a retired Army officer. The Colonel was to lead a bitter argument with the ARRL.

A world conference was held in 1927 to discuss spectrum allocation. At the conference, many frequencies formerly assigned to amateur radio were reassigned to commercial and other interests. Particularly serious was the loss of the high end of forty meters—an important segment for traffic and DX. ARRL represented amateur radio at this conference, and it was Colonel Foster’s contention that they had muffed the deal. Now, ever the opportunist, Dickow offered Foster the pages of his new



magazine, *Radio*, to bring his “cause” to the attention of radio amateurs. Foster saw this as a golden opportunity and accepted the offer. His strongly-worded articles in *Radio* gained him a considerable following, particularly on the West Coast. However, the controversy came to an abrupt end with the untimely death of Colonel Foster.

Foster’s “cause” may have helped get *Radio* started, but technical innovation by writers like Frank Jones kept it going for several more years. And it could be said that Dickow’s jump-the-gun policy of presenting the newest tubes and equipment and his emphasis on DX were contributing factors.

Jones wrote several handbooks to which this writer made minor contributions; Dickow published these books. All had the typical Jones innovations and technical merit, but could not gain necessary support in a depressed economy. It is arguable that these early efforts paved the way for such outstanding publications as Bill Orr’s *Radio Handbook*.

When I first met Frank Jones—over sixty years ago—my impression was of

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a man of medium height, full-faced, with glasses and inclined to pudginess. He was quiet-spoken but always had a civil answer—even to a silly question. A paradox was that he was said to have earned degrees in both mechanical and electrical engineering. Mechanical? It must be said that Frank was truly a haywire artist! He drove editors and photographers up the wall trying to straighten out prototypes for the magazine and his handbooks. He cared only for performance, not appearance. Strangely, his lack of interest in mechanical details caused me to effect a complete career change.

Western Wireless, a radio manufacturer, was owned by Charles Watson, formerly an engineer at Bell Labs. Charley's firm had received a contract to produce six base stations for the National Park Service and commissioned Frank to design and supervise production of the equipment. Time passed. One day, I received a call from Watson asking if I would like to come in and straighten out some mechanical details on six transmitters. I left *Radio* and went with Watson. All went well, and ultimately

Frank and I installed base stations in Death Valley and Yosemite. I remained to become general manager and later left to form my own business, Technical Radio.



Frank Jones designed, and Western Wireless built two UHF prototypes for the communication system to be used in the construction of the Bay Bridge. The project was directed by Reg Tibbetts, W6ITH, then

communications engineer for the bridge. Reg made changes in the original design to eliminate interference and improve performance and was responsible for final production. Reg—a Charter Member of NDXC—also induced a prominent manufacturer to produce a special vacuum tube that also enhanced performance.

Frank Jones had a brilliant mind. The late Hank Olson, W6GXN, told me that he understood that Frank had written a paper on UHF while still in college. If true, this was at a time when very little was known on the subject. I always knew that Frank was an old-timer but did not know just how far back he went—until I happened to see his callsign, 6AJF, in a 1921 callbook!

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DXer Tops in ARNS Contest

The *Bulletin* normally does *not* run “filler” stories from *QST*, ARRL Bulletins, *Worldradio*, or other wide-circulation publications—because ARNS members already have access to these sources. Instead, the *Bulletin* runs carefully selected and edited stories from its members' newsletters. That policy allows local budding writers to be published more widely than their local club's newsletter—added incentive for members to write for their club's paper.

Dave Barton, former editor of *The DXer*, now edits the ARNS Bulletin.



'97 Convention Co-Chairmen

President Al Burnham, W4RIM, has announced the appointment of two outstanding members to co-chair the 1997 International DX Convention—Rich Carbine, WB6UDS and Rich Chatelain, AB6ZV.

WB6UDS has served the club in many capacities, most recently as Chairman of the DXer of the Year Committee. AB6ZV serves as Director on the current BoD.

Organizing and presenting a major convention is a big job, requiring detailed planning and the help of many dedicated volunteers to ensure success. Look for some major innovations at the '97 convention.

The DXer applauds these appointments and urges every member approached by Rich and Rich to respond wholeheartedly with his or her time and energy.

—N16T



Changes in Communication on Pitcairn

Betty Christian, VR6YL

Radio communication with the outside world has always been an important part of our lives here on Pitcairn. Due to our isolation from the rest of the world, our only means of physical contact is by ships which pass by *en route* between Panama and New Zealand or Australia. Occasionally, some of these will stop here briefly.

During the 1950's, passenger vessels carrying immigrants to New Zealand from England would stop by for a visit every ten days or so. At that time, the population of Pitcairn was around 150, and the people were hard-pressed to produce enough handicrafts to sell to the passengers. Food and other supplies were easy to obtain—we could order from England, Panama and New Zealand, and mail service was regular in both directions.

The ships always carried a doctor and nurse, so medical service was also reasonably good and—if there was an emergency and someone required evacuation, we knew a ship would be fairly close by.

Then came air travel and, through the 1960's, the ships gradually disappeared. The population dwindled along with the ships, as more and more Pitcairn people—fearing they would not survive here—left for greener pastures overseas. Most went to New Zealand—over 3000 miles away.

During this time, radio communication was by CW from our commercial station ZBP, where weather observations were performed twice daily. These, along with telegrams were first transmitted through Rarotonga in the Cook Islands, thence

to Fiji, six days per week. Ships in the area were also contacted. Tom Christian, VR6TC, has been in charge of commercial communications since 1955 and has trained a number of local operators (including myself) over the years.

The only means of voice communications were through Tom, VR6TC and Floyd McCoy, VR6AC; Floyd became a silent key in 1963.

We have a nurse, but still have no doctor, and medical advice has often been sought by the nurse via amateur station VR6TC. In several cases, lives were saved—including mine when I suffered a complicated miscarriage in 1981.

In 1985, a radiotelephone link was set up between our commercial station, ZBP and Wellington Radio, ZLW, which connected us to the International Telephone Exchange in Auckland, New Zealand. Through this setup, we were able to make and receive telephone calls twice daily to any country at very reasonable cost. Unfortunately, this service was terminated in 1993.

Now we have "INMARSAT" communication and can send and receive telephone, facsimile and Telex calls via satellite—at a current cost of NZ\$20.85/minute to the USA and Canada, and NZ\$15/minute to other countries. However, at our present wage rate of NZ\$3.35/hour, people are not standing in line to use these facilities!

So, once more Amateur Radio is our main communication link with the outside world and probably the reason so many Pitcairners are now keen to sit the exams and get a licence to operate. With the licence, we can keep in regular touch with our families and friends overseas.

I say "Thank God for Ham Radio!"
—from the Pitcairn Amateur Radio Club (VR6PAC) Newsletter, VR6YL Editor submitted by Sam Canter, W6TSQ

Good Grief!

Ever had this problem?

"Whisky Alpha Six Alpha Hotel Foxtrot. Over."

"Rober, roger, George. You're 5 and 9 through the pile-up. But, George, you've got my call wrong. The last letter is Foxtrot. Over."

"Roger, roger, George. You still haven't got it right—it's Foxtrot: Foxtrot, Oscar, X-ray, Tango, Romeo, Ontario, Tango. By the way, the handle is Rubin. Romeo, Uniform, Bravo, India, November. Got it, George?"

"OK, George. No—the last letter of my call is *not* Rubin. Rubin is my handle. The last letter is *Foxtrot*, George. Over."

"Negative, negative. It's not *Foxtrot*

George—it's just Foxtrot *period*. Over."

"Aw, come on, George. I don't have any *period* in my call! It's Alpha Hotel Foxtrot. Got it, George? Over."

"No, no. Hotel is the *middle* letter, George. Over."

"Aw, forget it, George. I give up! WA6AHF clear."

"Hey! That's right, George—you got it right! Did you get my handle? It's Rubin. Romeo, Uniform, Bravo..."

—Rich Lawton, N6GG
reprinted from The DXer, June, 1978,
N6GG, Editor
contributed by Ron Rasmussen, NG6X

New Badges



Lloyd Cabral, AA6T (r) presents the first new Associate Member badge to Tom Adler, AB6RG. Lloyd recently selected a new supplier—and nifty new stickless

The Missing Q Signals

John Queen, KAØSEY

Some Q signals have never made it to the ARRL's official list. Yet you may agree, after reviewing those listed here, that at least a few of these would be useful. As with the regular Q signals, each can be a statement or a question, depending upon whether a question mark follows it.

QLF: "I'm sending with my left foot."

"Are you sending with your left foot?"

QRC: "Warning—rag chewer on frequency."

"Are you a rag chewer?"

QAH: "Please send me your QSL card so I can add it to my wall without bothering to send you mine."

"If you send me your QSL card, will you promise not to be upset when I don't send one back?"

QOK: "Your last transmission was okie-dokie."

"Was my last transmission OK?"

QFH: "This frequency is mine. Go elsewhere."

"Is this frequency hogged?"

QBS: "It's getting deep here."

"Did I tell you about the one that got away?"

QZZ: "I fell asleep on an open mike."

"Is that just 60 Hz hum, or are you snoring?"

QBA: "My antenna is big."

"How big is *your* antenna?"

QHI: "I'm jumping in quick to say 'hi,' then going QRT."

"Are you leaving after just one transmission?"

QBO: "Don't sit next to that guy in the meeting."

"Buddy, can you spare some soap?"

QCQ: Calling CQ in Q signals.

"Is there any end to this insanity?"

QNA: "Not applicable."

"Does that statement apply to anything?"

QOZ: "Tap your heels three times."

"Where am I?"

QPP: "I must QRT for five minutes; nature calls."

"Can you direct me to the nearest water closet?"

QTP: "I must QRT for fifteen minutes; nature calls."

"Did he fall in?"

QCW: "I am going to whistle Morse on FM (or SSB)."

"Why are you whistling Morse?"

QET: "Phone home."

"Has anyone called me from another planet?"

QFT: "Move back a foot from the microphone, you moron."

"Did I blow out your speaker?"

QGE: "I bring good things to life (to the party)."

"What good things do you bring to parties?"

—from the Nov. '95 Foundation for Amateur Radio "Auto-Call"—KAØSEY, Editor via the "ARNS Bulletin", AF6S, Editor



First Call for Nominations!

As mentioned in *RIMshots*, your editor, NI6T and Rich, AB6ZV have been appointed to the Nominating Committee by Al, W4RIM. We have appointed Tom McShane, NW6P as the third member. NI6T will serve as chairman.

The selection and election of officers and directors is the most important event in the club year, because those elected will set policy and direction for the club. If you choose not to participate in this process, you have little to complain about later, should the club proceed in a direction contrary to your expectations.

The Nominating Committee must report its selections in the June *DXer*, giving us less than two months to determine a slate. Your inputs and guidance are welcome and solicited; please feel free to contact any or all of us.

The Origin of Spread-Spectrum

Truth is often more bizarre than fiction.

One Hedwig Kiesler conceived the idea of radio signals spread sequentially over a number of predetermined frequencies, as a means of preventing jamming of our radio-controlled torpedos during World War II. George Antheil suggested the method: a perforated roll similar to a player piano roll, selecting the frequencies in the transmitter and receiver synchronously.

Antheil was a classical and jazz composer. His symphonic composition, *Ballet Mechanique* featured a player piano, as well as car horns, electric bells, airplane propellers, etc. Kiesler is better known as

movie actress Hedy Lamarr—still alive, we understand, at the age of 80 (*in 1990—Ed.*). They received no remuneration for their patent.

—Excerpted from Short Skip, from WVARC, Sun City, AZ. Ray Sumner, NW7R, Editor

Submitted by Ron, NG6X

FIRST CLASS



P. O. B O X 6 0 8
M E N L O P A R K, C A
9 4 0 2 6 - 0 6 0 8 U S A

Kazakh Greenstamp



April 1996